

ATTACHMENT A

LU 6154(US)



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of: Naka Seidel et al.)	
)	
Serial No.: 10/583,064)	
)	
Filed: June 15, 2006)	Examiner: Caixia Lu
)	
)	
For: PREPARATION OF SUPPORTED)	
COCATALYSTS)	Group Art Unit: 1796
)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

DECLARATION UNDER 37 CFR § 1.132

I, Dr. Bodo Richter hereby declare that:

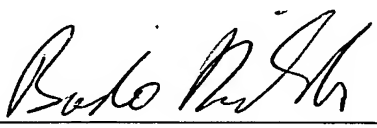
1. I am Dr. Bodo Richter.
2. In 1991 I received the Degree in metal organic chemistry from the TH "Carl-Schorlemmer" in Merseburg and in 1995 the PhD from the "Martin-Luther-Universität" Halle-Wittenberg, Germany.
3. Since 2002, I have been employed by Basell Polyolefine GmbH as a researcher in the field of metallocene catalyst development. From 1995 to 1997, I spent 2 years at the University of Toledo investigating the heterogeneous catalysis of

acetylenes. Starting 1997, I worked 1.5 years at the Rijksuniversiteit Utrecht in the field of catalysis employing perfluorinated systems. From 1999 to 2001 I worked in the field of boron and aluminium containing activators for metallocene catalysts at the Rijksuniversiteit Groningen.

4. I am a co-inventor of U.S. Application No. 10/583,064 ("Present Application") and am familiar with the specification and claims thereof.
5. I am familiar with International Publication WO 02/098930 of Lynch et al. ("Lynch"), cited by the Examiner in the prosecution of the Present Application.
6. In order to compare the supported catalyst system described in Lynch with the supported catalyst system recited in the claims of the Present Application, a polymerization catalyst was prepared using the method described in examples 1 and 2 of Lynch using the amount and type of catalyst components of Example 3 of the Present Application. Procedures and results of this experimental work are summarized in the attached Test Report.
7. That the results of the experimental work demonstrate that the catalyst system prepared by the method of Lynch results in a catalyst activity of 5.7 kg PP/(g of catalyst * hour). This compares to a catalyst activity of 9.8 kg of PP/(g of catalyst * hour) for the catalyst system of Example 3 of the Present Application.
8. That the polymer particles produced by the method of the Present Application, illustrated in Figure 1, are finely divided without lump formations, whereas the polymer particles produced by the method of Lynch are polymer lumps of different size.

9. I further declare that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true, having been informed that willful false statements and the like are punishable by fine or imprisonment, or both under 18 U.S.C. § 1001, and may jeopardize the validity of the application or any patent issuing thereon.

____ May 13th, 2008 ____
Date



Dr. Bodo Richter

Test Report

Synthesis of a supported catalyst according to Examples 1 and 2 of WO 02/098930 (Lynch)

Preparation of an activator from triethylaluminum and pentafluoroboronic acid

Pentafluoroboronic acid (0.56 g, 2.64 mmol) was added in small portions to a stirred solution of triethylaluminum (2.8 ml of 1.9M solution in toluene; 0.61 g; 5.32 mmol) at room temperature in a dry-box. The resulting solution was stirred for an additional 15 min. before use.

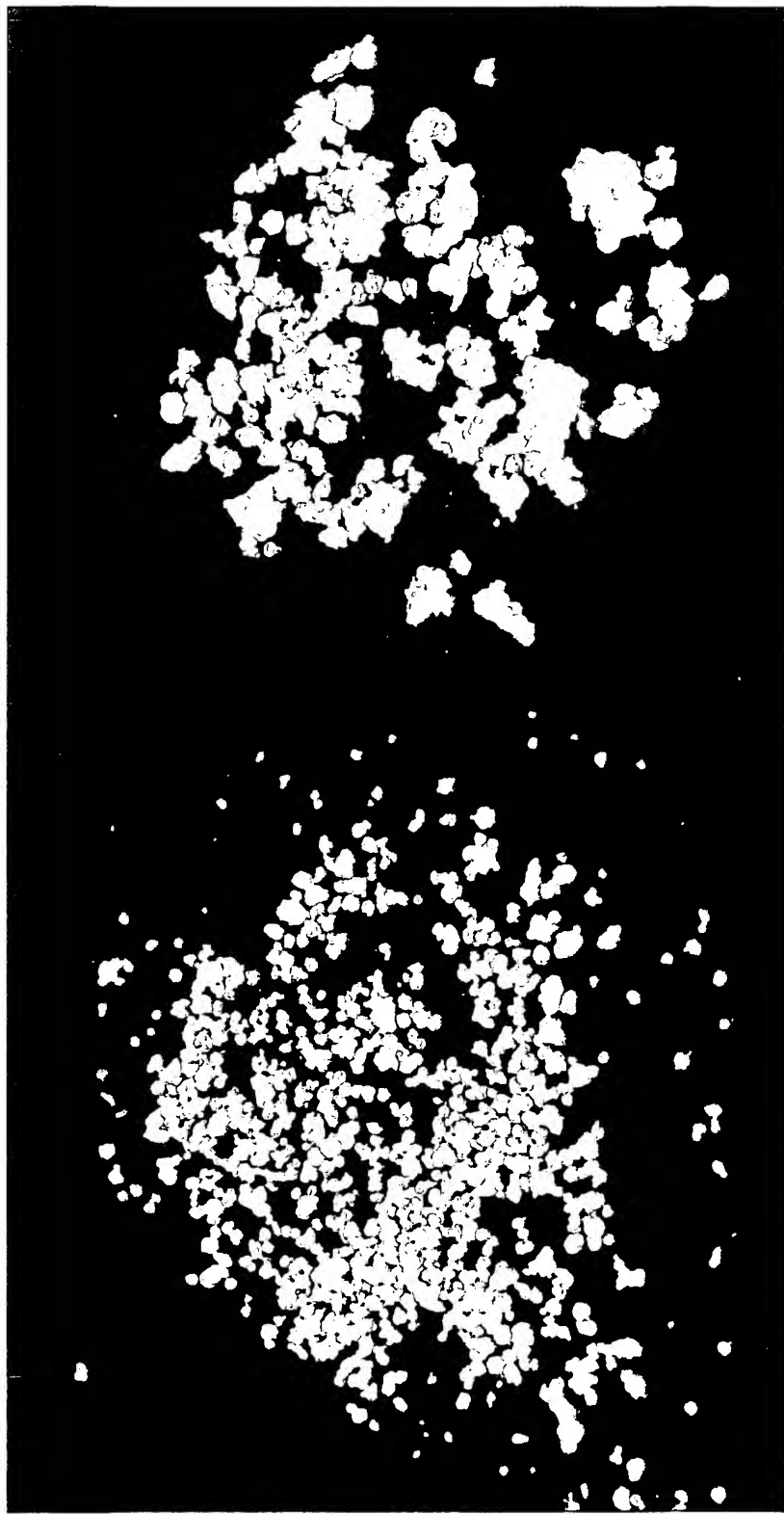
Preparation of a supported indenyl zirconium catalyst

A portion of the activator suspension (1.4 ml) is added slowly to a stirred bed of silica (XPO 2107, Grace, dried at 180 °C for 10 h, 1.5 g). In a separate vial, dimethylsilyl-bis(2-methyl, 4-phenylindenyl)-zirconiumdimethyl (59.1 mg) was added to the other portion (1.4 ml) of activator solution at room temperature, and the mixture was stirred for 15 min. The resulting red-brown solution was added to a stirred bed of the activator-pretreated silica to give a light brown powder.

Polymerisation

A 14 L autoclave was charged with 3.5 ml (7mmol) of a 2M solution of triisobutylaluminum in heptane, 135 mg of H₂ and 3.5 kg of liquid propylene. The autoclave was heated to 40°C when 200 mg of the above mentioned catalyst powder was injected. The temperature was maintained for 10 minutes and after that increased to 65 °C and maintained for 1 h. The polymerization was stopped by venting off the autoclave. 1135 g of polymer with bad morphology was obtained, which correspond to an activity of 5.7 kg/gh.

FIGURE 1



Present application

Lynch